

CLAIMS

1. A process for producing acrylic acid, comprising the steps of: applying a dehydration reaction to glycerol as a raw material in a gas phase; and then applying a
5 gas phase oxidation reaction to a gaseous reaction product formed by the dehydration reaction.
2. The process for producing acrylic acid according to claim 1, wherein the glycerol is subjected to the dehydration reaction in the form of an aqueous glycerol solution having a water content of not more than 50% by weight.
- 10 3. The process for producing acrylic acid according to claim 1 or 2, wherein the dehydration reaction and the gas phase oxidation reaction are conducted in a tandem-type reactor.
4. The process for producing acrylic acid according to claim 3, wherein oxygen is added to a gas which is transferred from the dehydration reaction to the gas phase
15 oxidation reaction.
5. The process for producing acrylic acid according to claim 1 or 2, wherein the dehydration reaction and the gas phase oxidation reaction are conducted in a single-type reactor.